

## Shapes of molecules

**QUESTION:** For each of the molecules shown in the table

i) draw a 3dimensional (3D) arrangement of the atoms in each molecule

ii) name the shape of each molecule

iii) state the bond angles

$\text{PH}_3$	$\text{CO}_2$	$\text{H}_2\text{CO}$
$\text{O}_2$	$\text{CH}_3\text{Br}$ or $\text{CH}_3\text{Cl}$	$\text{SO}_2$
$\text{H}_2\text{O}$	$\text{CH}_2\text{Br}_2$ or $\text{CH}_2\text{Cl}_2$	$\text{CS}_2$
$\text{XO}_2$ (where X has 4 valence electrons)	$\text{YO}_2$ (where Y has 6 valence electrons)	$\text{NCl}_3$
$\text{PBr}_3$ or $\text{PCl}_3$	$\text{H}_2\text{S}$	$\text{COCl}_2$

$\text{OCl}_2$ aka $\text{Cl}_2\text{O}$	$\text{SiCl}_4$	$\text{HCN}$
$\text{SF}_2$	$\text{F}_2\text{O}$	